

MOUNT IMLAY NATIONAL PARK

PLAN OF MANAGEMENT

NSW National Parks and Wildlife Service

October 1998

This plan of management was adopted by the Minister for the Environment on 4 October 1998

Acknowledgements: This plan of management was prepared by staff of the Field Services Division in co-operation with Eden District of the National Parks and Wildlife Service. The Eden District Advisory Committee made a valuable contribution to the finalisation of this plan of management.

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NSW National Parks and Wildlife Service.

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FOREWORD

Mount Imlay National Park is located in the far south coast hinterland of New South Wales, approximately 20 km southwest of Eden. It has an area of 3 808ha and consists of steep, deeply dissected forested country around the peak of Mount Imlay.

The park has a variety of natural habitats and is important as a refuge area for the conservation of the native plants and animals of the district, including a number of threatened or geographically significant species.

The summit of Mount Imlay is of particular scientific interest because of its largely undisturbed nature, the presence of several threatened plant species and its biogeographical similarity to Tasmanian peaks.

The summit also has high natural landscape and recreational value. It is a distinctive and prominent peak in the Eden district and is a popular walking destination.

The park will be managed primarily to protect its habitat values and populations of native plants and animals. This will be achieved by maintaining most of the park in a natural and undisturbed condition by appropriate fire management and the control of introduced plants and animals where necessary. Survey and research to improve understanding of the species diversity and ecology of the area will be encouraged.

The Black Range Fire Trail and the existing walking track to the summit of Mount Imlay will be maintained. This plan also proposes to establish a walking route, if feasible and with the co-operation of State Forests, from the summit of Mount Imlay to Imlay Creek and thence via the creek to Imlay Road in East Boyd State Forest. A pack camp site may also be provided along the track.

This plan of management establishes the scheme of operations for Mount Imlay National Park. In accordance with the provisions of Section 75 of the National Parks and Wildlife Act, 1974, this plan of management is hereby adopted.

PAM ALLAN

Minister for
the Environment

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1. INTRODUCTION

The National Parks and Wildlife Act, 1974, requires that a plan of management be prepared for each national park. A plan of management is a legal document that outlines how the area will be managed in the years ahead.

The procedures for the adoption of a plan of management are specified in the Act and involve five stages:

- * The Director-General gives notice that a plan of management has been prepared.
- * The plan is placed on public exhibition for at least one month and any person may comment on it.
- * The plan and copies of all representations are referred to the National Parks and Wildlife Advisory Council for consideration.
- * The Director-General submits the plan, together with the recommendations of the Advisory Council, to the Minister.
- * The Minister may adopt the plan, with or without amendment, after considering the recommendations of the Advisory Council or may refer the plan back to the Director-General and Council for further consideration.

A draft plan of management for Mount Imlay National Park was placed on public exhibition for a period of three months ending 19th May 1997. During the period of public exhibition, seven representations were received which raised eight issues. These representations were referred to the National Parks and Wildlife Advisory Council for review and report to the Minister. The comments and suggestions of the Advisory Council were in turn considered by the Minister when adopting this plan.

Once a plan of management has been adopted by the Minister, no operations may be undertaken within the national park except in accordance with the plan.

For additional information or enquiries on any aspect of the management of Mount Imlay National Park, please contact:

The District Manager
National Parks and Wildlife Service
Corner Merimbula Drive and Sapphire Coast Road
(P.O. Box 656)
MERIMBULA 2548

or by telephone on (02) 6495 4130

2. MANAGEMENT CONTEXT

2.1 NATIONAL PARKS IN NEW SOUTH WALES

The national park concept was introduced into Australia through the establishment of Royal National Park in 1879.

The International Union for the Conservation of Nature and Natural Resources (IUCN) in 1994 defined a national park as:

"A natural area of land/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for the spiritual, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible."

National parks are part of the regional pattern of land use. The management of a national park aims to minimise disturbance to natural and cultural resources. Other land uses, such as agriculture, forestry and mining, are distinguished by an acceptance or encouragement of environmental modification. National parks, therefore, provide for only a limited part of the range of land uses in a region.

2.2 MOUNT IMLAY NATIONAL PARK

2.2.1 Location, Reservation and Regional Setting

Mount Imlay National Park is located on the far south coast of NSW approximately 20 km southwest of Eden. It is centred around the peak of Mount Imlay in the coastal hinterland and is largely surrounded by state forest.

The national park was reserved in 1972 and now has an area of 3 808 ha.

The far south coast supports mainly forestry operations, tourism, fishing and agriculture. It is a popular holiday area, attracting large numbers of visitors during the summer to coastal towns such as Tathra, Eden and Merimbula.

2.2.2 Importance of Mount Imlay National Park

The important features of Mount Imlay National Park are outlined below.

Landscape Values

The park is a rugged forested area with high natural landscape value, centred on Mount Imlay. Mount Imlay, at 886 m ASL, is the most visually prominent natural feature in the Eden district and is visible from much of the coastal area. It is distinctive because of its conical shape, naturalness height and isolation from nearby peaks.

Very extensive views are available from the summit. These stretch along the coast from Mallacoota in Victoria to beyond Narooma in the north and to the Monaro Tablelands in the west.

As well as the landscape value of the Mount Imlay peak itself, the steep rocky ridges, deep gullies, cliffs, permanent and semi-permanent watercourses, waterfalls and areas

of tall forest in the remainder of the park give the area great visual appeal. This contrasts with the logged forests in various stages of regeneration surrounding the park.

Biological Values

The park contains a variety of native vegetation communities including heath, open forest, tall open forest and rainforest in an area which is subject to intensive forestry operations. Along with nearby protected areas such as the South East Forests National Park, Mount Imlay National Park is important for conservation of the range of plant and animal species occurring in the south coast forests including rare and threatened species. These reserves, together with protected areas of state forest, act as refuges for maintenance of wildlife populations and for re-colonisation of nearby disturbed areas.

A number of threatened or biogeographically significant plant species occur in the park. Several are found on the summit of Mount Imlay. These are:

- *Eucalyptus imlayensis*; the rarest species of eucalypt, endemic to Mount Imlay and classified as endangered in Schedule 1 of the Threatened Species Conservation Act 1995;
- *Pomaderris costata*; nationally uncommon;
- *Persoonia brevifolia*; nationally uncommon, close to northern limit;
- *Monotoca elliptica*; unusual montane occurrence, likely to be recognised as separate, uncommon taxa;
- *Parietaria debilis* var. *debilis*; regionally uncommon;
- *Gahnia subaequiglumis*; regionally uncommon;
- *Prostanthera walteri*; nationally uncommon, close to southern limit; and
- *Tetratheca subaphylla*; uncommon throughout distribution.

Significant species found elsewhere in the park include:

- *Calotis glandulosa*; nationally uncommon, close to southern limit and classified as vulnerable in Schedule 2 of the Threatened Species Conservation Act 1995;
- *Eriostemon virgatus*; disjunct population, close to northern limit;
- *Hibbertia saligna*; regionally uncommon, southern limit, disjunct population;
- *Leptospermum scoparium*; near northern limit;
- *Pomoderris cinerea*; at southern limit; and
- *Pseuderanthemum variable*; at southern limit.

Eucalyptus imlayensis, the entire wild population of which occurs on Mount Imlay, appears to be related to Tasmanian eucalypts. Further evidence for this is the presence of the shrub *Eriostemon virgatus* in association with *E. imlayensis*. This species normally occurs in Tasmania and Mount Imlay is one of only a few locations on the Australian mainland. The weevil *Aterpus kubus* has also been collected on the summit. Other records for this species are in Tasmania and the Victorian Alps.

Mount Imlay therefore appears to be biogeographically related to Tasmanian peaks and to provide interesting material for migration and distribution studies (Brooker in Worboys (1978); Crisp and Brooker, (1980)).

Stands of white ash *E. fraxinoides* just below the summit of Mount Imlay are important as this species has a restricted distribution. The heath and woodland habitats on the summit and areas of closed forest just below the summit are also important as they are uncommon in the district.

Because of its biogeographical interest and the presence of several rare or significant plant species and communities the summit of Mount Imlay is scientifically important and of high conservation significance.

Three animal species listed as vulnerable on Schedule 2 of the Threatened Species Conservation Act 1995 have been recorded in the park. These are the:

- long-nosed potoroo *Potorous tridactylus*;
- koala *Phascolarctos cinereus*; and
- tiger quoll *Dasyurus maculatus*.

Recreational Value

The primary recreational feature of the park is the summit of Mount Imlay. The mountain is of great recreational interest as a prominent natural landmark in the district. It provides one of relatively few opportunities for a moderate length walk (3 hours return) on a marked track to the top of a mountain within a primarily natural landscape. The walker is rewarded with commanding views of the district in all directions and a strong sense of achievement. The changing vegetation during the ascent and the cool, exposed mountain top are of considerable interest. Spring wildflower displays including masses of boronias are a feature of the summit.

The park is readily accessible from nearby coastal towns including popular holiday centres such as Merimbula and Eden. The summit walking track has the potential to be a popular tourist attraction.

Away from the summit track, the rugged forested landscape of the park provides a variety of opportunities for remote walking and self-reliant bush camping.

The recreational opportunities of the park complement the more developed opportunities along the coastline, including those in coastal parks such as Bournda and Ben Boyd National Parks and those being established in the South East Forests National Park.

3. OBJECTIVES OF MANAGEMENT

3.1 GENERAL OBJECTIVES FOR NATIONAL PARKS

The following general objectives relate to the management of national parks in New South Wales:

- * protection and preservation of scenic and natural features;
- * conservation of wildlife;
- * maintenance of natural processes as far as is possible;
- * preservation of Aboriginal sites and historic features;
- * provision of appropriate recreation opportunities; and
- * encouragement of scientific and educational enquiry into environmental features and processes, prehistoric and historic features and park use patterns.

3.2 SPECIFIC OBJECTIVES FOR MOUNT IMLAY NATIONAL PARK

In addition to the above general objectives the management of Mount Imlay National Park will be subject to the following specific objectives:

- * protection of the high natural landscape value and sense of isolation of Mount Imlay;
- * protection of the scientific significance of Mount Imlay;
- * maintenance of populations of threatened or biogeographically significant plant and animal species occurring in the park;
- * protection of the high habitat values of the park for maintenance of populations of plants and animals in the south coast district;
- * protection of the value of the park, and of Mount Imlay in particular, for walking and self-reliant recreation.
- * encouragement of community appreciation and understanding of the high conservation values of the park; and
- * promotion of the Mount Imlay summit track as an ecotourism and educational feature.

3.3 OVERALL STRATEGY

The majority of the park will be maintained in as natural and undisturbed a condition as is possible in order to protect its high value as a refuge area for native plants and animals. Development of recreational or management facilities will be kept to a minimum.

Survey and research will be encouraged to improve understanding of the diversity and management needs of the native plants and animals in the park. Introduced species will be controlled as necessary and fire will be managed to maintain the high habitat value of the mature forests while meeting the Service's fire protection responsibilities under the Rural Fires Act.

4. POLICIES AND FRAMEWORK FOR MANAGEMENT

This chapter contains the policies and framework for the management of Mount Imlay National Park together with relevant background information. Policies are summarised under the following section headings:

- 4.1 Mount Imlay National Park: Its Natural and Cultural Landscapes; and
- 4.2 Use of the Area

The policies established in this plan of management provide the framework for management consistent with the significance of the park, with anticipated resources available to the Service and anticipated community trends for the next five to ten years.

The actions identified are those to which priority will be given in the foreseeable future. Other management actions may be developed over the life span of this plan consistent with the policies set out in the plan.

Where not specifically provided for in this plan, management will also be in accordance with the National Parks and Wildlife Act and with general Service conservation and management policies.

4.1 MOUNT IMLAY NATIONAL PARK: ITS NATURAL AND CULTURAL LANDSCAPES

4.1.1 Geology, Soils, Catchment and Landscape

Most of Mount Imlay National Park is formed on Ordovician Period (500 to 435 million years ago) sedimentary and metamorphosed rocks of the Murrumbidgee Beds, an extensively occurring member of the Southern Highlands Fold Belt. Rock types include sedimentary rocks such as greywacke, sandstone and shale.

The summit of Mount Imlay and surrounding upper slopes consist of Devonian (395 to 345 million years ago) rocks of the Merimbula group lying above the Ordovician sediments. The Merimbula Group includes sandstone, conglomerates, quartzite, siltstone and shale. It outcrops intermittently between the Victorian border and the Yalwal area, west of Nowra.

Narrow strips of river flats with Quaternary sediment are located along the Towamba River on the northern edge of the park.

Mount Imlay dominates the park. The summit area is small, dropping steeply to the north, east and south, with cliff lines in the north and southeast. The western side is less steep, falling in a series of steps formed by differential erosion of the alternating bands of sandstone, conglomerate and shale. Ridgelines radiate from the top of the mountain, forming the framework for the rest of the park, which is deeply dissected and consists of narrow rocky ridges and deep gullies.

Water quality is very high as no water courses flow into the park from neighbouring land. From Mount Imlay, the park drains west and south to Imlay Creek, east to Old Road Creek and northwards to the Towamba River. Imlay Creek and two major tributaries form the southwestern boundaries of the park while the northern boundary reaches in places to the Towamba River. Imlay Creek and the Towamba River are permanent watercourses.

Soils on the summit and ridges of Mount Imlay are shallow and dominated by rock fragments. Sandy soils on the very steep upper slopes are loose and extremely

erodible and are therefore subject to a considerable amount of soil movement. Significant erosion has occurred in previously disturbed areas. Major soil erosion control works were implemented in 1975 along a former vehicle track on the south-western face of the mountain. Despite vegetation regrowth since the track's closure, erosion is continuing to occur along the upper third of the route. Further growth of vegetation cover is expected to eventually stabilise the track route.

As stated in section 2.2.2 the rugged landform of the park, and of Mount Imlay in particular, has high natural landscape value, contrasting with the surrounding logged forests and cleared valleys. Maintenance of the park's natural character, sense of isolation from more developed areas and its value for walking and self-reliant recreation depends upon protection of the natural landscape.

Policies

- * All development, protection and incident control activities within Mount Imlay National Park will incorporate effective soil erosion and sedimentation control principles and practices.
- * The catchment values of the park will be protected by maintenance of natural vegetation cover and water quality.
- * The high natural landscape value of the park will be protected.
- * No new works or development will be undertaken in visually prominent locations. In particular no new structures or other works will be located on the summit of Mount Imlay.

4.1.2 Plants, Animals and Habitats

Native plants

Extensive areas of open forest dominated by silvertop ash *Eucalyptus sieberi* occur on the ridges and dry slopes of the park. Other common trees are yellow stringybark *E. muellerana* and occasionally *E. globoidea* and blue-leaved stringybark *E. agglomerata*. The understorey is shrubby; common species include native cherry *Exocarpos cupressiformis*, hickory wattle *Acacia falciformis*, shiny cassinia *Cassinia longifolia*, *Tetradlea thymifolia*, narrow-leaf geebung *Persoonia linearis*, *Acacia obtusifolia*, prickly broom-heath *Monotoca scoparia*, smooth geebung *Persoonia levis* and *Banksia collina*.

Moist sheltered gullies and slopes support open forest and tall open forest of yellow stringybark, monkey gum *E. cypellocarpa* and river peppermint *E. elata*. Shrubs include hop goodenia *Goodenia ovata*, blue olive-berry *Elaeocarpus reticulatus*, lance beard-heath *Leucopogon lanceolatus* and fireweed groundsel *Senecio linearifolius*.

On the rocky summit of Mount Imlay is a woodland dominated by *Eucalyptus sp. aff. radiata*. Other tree species are mainly silvertop ash and messmate *E. obliqua*. There are some areas of tall heath with pockets of mallee form eucalypts. The heath is dominated by *Leptospermum spp.* Other shrubs include scented paperbark *Melaleuca squarrosa*, matrush *Lomandra longifolia*, *Boronia pinnata*, sunshine wattle *Acacia terminalis*, prickly broom-heath, *Hibertia dentata* and common oxycobium *Oxylobium arborescens*.

White ash *E. fraxinoides* occurs on the steep southeast-facing slopes of Mount Imlay and is dominant just below the ridge crest. This species has a restricted distribution.

Associated species include messmate, silvertop ash, *Tasmannia lanceolata*, lance beard-heath and shrubby platysace *Platysace lanceolata*.

Areas of closed forests dominated by black olive-berry *Elaeocarpus holopetalus* with banyalla *Pittosporum bicolor*, soft tree-fern *Dicksonia antarctica*, *Blechnum wattsii* and *Pomaderris* spp. occur in the gullies below the summit.

The rare, endemic species *E. imlayensis* occurs in a stand of less than 200 trees. It grows in mallee form emergent above closed heath. The site receives a great deal of moisture from orographic clouds and has microhabitat characteristics different to those nearby. It is probable that *E. imlayensis* has adapted to the specific features of the site and, because of the small population and genetic isolation, could not tolerate even minor disturbances to its habitat (Brooker, notes in Worboys 1978).

Protection of the natural character of the Mount Imlay summit is important for the conservation of the population of *E. imlayensis* and the other rare or significant plant species occurring on the summit (listed in section 2.2.2).

Native animals

Knowledge of native animal communities in the park is very limited.

Native birds known to occur in the park include the gang gang cockatoo *Callocephalon fimbriatum*, superb lyrebird *Menura novaehollandiae*, little eagle *Hieraaetus morphnoides*, wedge-tailed eagle *Aquila audax*, wonga pigeon *Leucosarcia melanoleuca*, common bronzewing *Phaps chalcoptera*, yellow-tailed black-cockatoo *Calyptorhynchus funereus*, red-browed finch *Emblema temporalis*, little lorikeet *Glossopsitta pusilla*, king parrot *Allisterus scapularis* and grey currawong *Strepera versicolor*.

Native mammals recorded include the red-necked wallaby, swamp wallaby *Wallabia bicolor*, greater glider *Petauroides volans*, brushtail possum *Trichosurus vulpecula*, eastern pigmy-possum *Cercartetus nanus*, platypus *Ornithorhynchus anatinus*, wombat *Vombatus ursinus* and bush rat *Rattus fuscipes*

Reptiles known to occur are the red-bellied black snake *Pseudechis porphyriacus*, brown snake *Pseudonaja textilis*, lace monitor *Varanus varius* and Cunningham's skink *Egernia cunninghami*.

Further survey is needed to extend the list of species recorded and in particular to determine whether threatened species occur in addition to the recorded long-nosed potoroo, koala and tiger quoll. The park provides suitable habitat for the olive whistler *Pachycephala olivacea*, sooty owl *Tyto tenebricosa*, glossy black cockatoo *Calyptorhynchus lathamii*, regent honeyeater *Xanthomyza phrygia*, smoky mouse *Pseudomys fumeus*, yellow-bellied glider *Petaurus australis* and bent-wing bat *Miniopterus schreibersii*.

Under the Threatened Species Conservation Act a recovery plan must be prepared for endangered (Schedule 1) and vulnerable (Schedule 2) flora and fauna. The purpose of a recovery plan is to promote the recovery of a threatened species, population or ecological community to a position of viability in nature. Recovery plans for species listed on Schedule 1 must be prepared within five years from December 1995 and within 10 years for species listed on Schedule 2.

Habitat protection

Habitats in the park range from heath and woodland on the Mount Imlay summit to riverine forest along the Towamba River. There are extensive areas of dry ridge forest and tall eucalypt forest, with some rainforest in the gullies. Recent mapping has shown that about half of the park is old growth forest, occurring in a fragmented manner.

Many of the threatened native animal species, as well as arboreal mammals, depend upon moist and old growth forests. Protection of these forests from too-frequent fire is vital. Fire management is discussed in section 4.1.4. Protection of the heath/woodland habitats on the Mount Imlay summit also has high priority because of the scarcity of this habitat type in the park and the district.

The park is relatively small and it is vital for it to be maintained in a relatively natural and undisturbed state. Adjacent state forests make an important contribution to wildlife conservation in the district and assist in maintaining the long term viability of the park.

Introduced Species

There are no known significant weed species occurring in the park.

Wild dogs, foxes and a small number of rabbits have been recorded in the park. It is likely that cats also occur.

The effect of introduced predators on native animals in the park is not known. The extent of vehicle tracks and disturbance in adjacent areas is likely to have favoured high numbers of predators. Avoidance of new vehicle tracks and of extensive destruction of ground cover by fire is extremely important for protection of native animal populations in the park from predators.

Policies

- * The diversity of native plant and animal communities and species occurring in the park will be conserved.
- * Areas of rare, threatened or biogeographically significant plant species will be protected from disturbance.
- * Research into the distribution and management requirements of plants classified under the Threatened Species Act and which occur in the park will be encouraged.
- * Surveys of native animal species in the park will be encouraged.
- * Introduced animals will be controlled as far as practicable where they have a significant impact on native animals or habitats.
- * The cooperation of NSW State Forests, other authorities and park neighbours will be sought for undertaking combined pest control programs where appropriate.

Action

- * The impact of introduced animals in the park will be assessed and control programs will be undertaken if necessary.

4.1.3 Cultural Heritage

Very little survey has been undertaken for Aboriginal sites in the park. While no sites are known it is likely that some occur, particularly along the permanent creeks and main ridgelines. Several small open camp sites have been recorded in the area around the park.

In common with other prominent peaks in the district such as Mount Dromedary and Mumbulla Mountain, it is possible that Mount Imlay had religious significance to the Aborigines. It has been reported that Mount Imlay was used as a site for telepathic communication with groups to the north near Wallaga Lake (Crew, 1993).

The park falls within the area of the Eden Local Aboriginal Land Council.

The area of what is now Mount Imlay National Park was used for selective logging prior to its reservation as a national park and a trigonometrical station was also established on the summit. During the 1960's a fire trail was built to the summit which also gave access to the trig station. This was closed during the early 1970's and the route allowed to revegetate.

The summit of Mount Imlay has attracted increasing numbers of bushwalkers in recent years.

Policies

- * The Service will liaise with the Eden Local Aboriginal Land Council about all aspects of management of Aboriginal heritage in the park.
- * All work involving ground disturbance proposed for the park will be preceded by an inspection for Aboriginal sites.
- * Survey for Aboriginal sites and research into past Aboriginal use of the area will be encouraged.
- * Any historic places found in the park will be managed in accordance with the Burra Charter of Australia ICOMOS.

4.1.4 Fire Management

Fire is a natural feature of the environment of the park and is essential to the survival of some plant communities. Frequent or regular fire, however, can cause loss of particular plant and animal species and communities. Fire can also damage some types of Aboriginal sites, historic sites and recreation facilities and threaten visitors and neighbouring land.

Management of fire in the park is an important and complex issue. Management must aim to achieve both protection of life and property adjacent to the park and long term conservation of natural communities.

Fire history and ecological requirements

The pre-European fire history of the park is not known but it is likely that the pattern of occurrence of fire has altered since European settlement.

Extensive fires burnt through the district, including the park, during 1972/73, shortly after reservation. Since then the only known unscheduled fires which have occurred were two fires which escaped from adjacent private property during 1980.

A variety of fire regimes is necessary in order to conserve floristic diversity and provide diversity of habitat for animals. Fire management aims to maintain this diversity by restricting planned and, if possible, unplanned fires to only a part of the distribution of a vegetation type within the park at any one time. This approach will ultimately result in a mosaic of age classes for each of the vegetation types of the park. Fuel management burning is undertaken as needed.

The response to fire of threatened plants in the park is not known. Many plants tend to be fire sensitive, however, and management should aim as far as possible to minimise the effects of fire in areas of rare species.

Strategies and cooperative arrangements

The Service is actively involved in local cooperative fire management arrangements through district fire committees set up under the Rural Fires Act, 1979. These aim to coordinate and monitor fire management and fire control on a district basis.

A variety of fire management strategies have been developed including fuel reduction, fire trails, detection and cooperative arrangements. Some, or at times all, of these are applied where appropriate to best protect life, property and natural and cultural assets within and adjacent to the park.

A fire management plan will be prepared for the park by the end of 1998. The plan will examine in detail fire behaviour, risks, access, the ecological requirements of the park's plants and animals, fuel management strategies, fire control mechanisms and cooperative arrangements. It will be placed on public exhibition.

The Black Range Fire Trail passes from state forest through the northwestern section of the park to the Towamba River. This trail is strategically located as most intense wildfires in the district are carried by hot northwesterly winds.

Adjacent private property along the northern boundary of the park may be affected by fire in the park. The risk is not considered to be high as the private property is generally located down hill and to the north of the park. Fires escapes from private property could, however, severely affect the park. The complicated boundary configuration makes cooperative mutual fire protection important. Cooperative strategic fuel management is appropriate.

Policies

- * Fire will be managed in accordance with the fire management plan to be prepared for the park and the principles below to ensure:
 - protection of human life and property within and adjacent to the park;
 - conservation of threatened and biogeographically significant plant and animal species and communities; and
 - maintenance of those plant and animal species and communities which require a particular fire frequency or intensity.
- * Prescribed fire may be used where appropriate to reduce fuel loads in areas of identified high risk in order to protect neighbours and fire sensitive vegetation.
- * Fuel management burning will be carried out as far as possible in autumn when a low to moderate fire intensity may be achieved.

- * Prescribed fire will not be used in low risk areas or within or immediately adjacent to rare or threatened plants, rainforest and other areas of fire sensitive vegetation.
- * The Service will seek to involve neighbours in cooperative fuel management and other fire protection measures for mutual protection.
- * Fuel management programs will be based upon assessment of fuel levels and on risks to life and property and park biophysical values.
- * Unscheduled fires will be contained to as small an area as possible.
- * Records will be kept of all fires within the park.
- * Research will be encouraged into the fire response of the rare and threatened plant species occurring within the park.
- * Close contact will be maintained with other fire authorities. The Service will continue to actively participate in local District Bush Fire Committees.
- * Land use planning authorities and developers will be encouraged to incorporate fire protection measures in any development adjacent to the park.
- * The Black Range Fire Trail will be maintained in a trafficable condition.

Action

- * A fire management plan will be prepared by the end of 1988.
- * A detailed vegetation map and fire management plan will be prepared for the park.

4.2 USE OF THE PARK

The major categories of use that can be appropriate, to varying degrees, on Service areas are:

- education and promotion of the area, the Service and the conservation of natural and cultural heritage;
- certain types of recreation;
- research;
- management operations, by the Service itself and other authorities with statutory responsibilities in the area.

The extent to which these categories of use will be provided for in Mount Imlay National Park is indicated below.

4.2.1 Promotion and Interpretation

While the peak of Mount Imlay is a prominent feature of the Eden district, the important natural features of the park and its role in conservation of the plants and animals of the district are not well known. Promotion of public understanding and appreciation of the

values of the area is needed. On-going provision of information about recreational opportunities is also an important part of management.

A National Parks and Wildlife Service information/interpretive shelter is located at the picnic area at the end of the Burrawang Forest Road in East Boyd State Forest. This picnic area is also the beginning of the Mount Imlay summit walking track which is the major point of visitor access to the park. Promotion of tourist and local use of the track would improve knowledge and appreciation of the values of the park.

Policies

- * Understanding and appreciation of the conservation values of the park will be promoted in the local community and to park visitors through such means as distribution of brochures to tourist information outlets, media releases and Discovery Ranger programs.
- * The availability of the summit walking track and other recreation opportunities in the park will be promoted.
- * The following themes will be emphasised in promotion and interpretation programs:
 - the importance of the park for conservation of a sample of the natural environments and plants and animals of the district in an area subject to intensive logging operations;
 - the presence of threatened and biogeographically significant plant and animal species in the park;
 - the significance of the Mount Imlay summit for the conservation of threatened species and its unusual biogeographical link to Tasmanian peaks.
- * The information/interpretive shelter at the foot of the summit walking track in East Boyd State Forest will be maintained with the co-operation of NSW State Forests. Additional interpretive information may be provided however this should be undertaken with minimal impact on the natural character and vegetation of the area.

4.2.2 Recreation Opportunities

The summit of Mount Imlay is the focus for recreational use of the park. Almost all visitors walk to the top of the mountain via the walking track from the eastern side. The walking track begins at a picnic area within East Boyd State Forest and is the only recreation facility currently provided in the park. Maintenance of the picnic area, access road and signposting in conjunction with State Forests is of benefit to visitors to the park.

The picnic area contains a parking area, watertank and information/interpretive shelter. Signposts lead to the area from the Princes Highway. Picnic and camping areas are also available nearby in Ben Boyd National Park, Nadgee Nature Reserve, Nullica, Nadgee, Timbillica and Yambulla State Forests and coastal towns.

The walking track to the summit is steep and in places is rough where it passes over rocky slopes. The number of walkers using the track is not known but is thought to be moderately high. There is little evidence of excessive use causing vegetation damage or erosion of the track. Protection of the natural character of the summit is important.

A very small amount of walking and bush camping probably occurs in other parts of the park. The rugged and undeveloped nature of the park and the presence of permanent watercourses makes it suitable for self-reliant walking, despite its small size. The eastern side of Imlay Creek offers excellent potential for development of a walk linking the summit with Imlay Road.

The Black Range Fire Trail receives very little vehicle traffic as it does not provide access to recreation facilities or locations. It is not a through track but enters private property at its northern end. The track is currently in good 4WD condition. Increased public use, particularly during wet weather, could cause deterioration because of the steep slopes.

Horseriding is not a known recreational use in the park and is not appropriate because of the potential for erosion of steep slopes and spread of weeds into a currently largely weed-free area.

Policies

- * The park will be managed to provide opportunities for day walks to the Mount Imlay summit and for extended walking and bush camping in the remainder of the park.
- * The walking track to the summit of Mount Imlay from the Burrawang Road picnic area will be maintained. The track may be re-aligned or upgraded if necessary.
- * There will be no new built structures on the summit.
- * The Service will maintain liaison with NSW State Forests to ensure the continued availability of the Burrawang Picnic Area, access road and signposting.
- * Public vehicle use of the Black Range Fire Trail will not be promoted. It may be closed to the public if unacceptable environmental damage occurs.
- * Facilities for vehicle-based camping are not provided in the park. Pack camping will be permitted more than 1 km from public vehicle access roads.
- * Horseriding will not be permitted in the park.

Action

- * The desirability of providing a marked walking route and pack camping site along Imlay Creek between the summit and Imlay Road will be investigated. Any proposal will be subject to a review of environmental factors which will be placed on public exhibition.
- * The impact of visitation on the summit will be monitored.

4.2.3 Research Use

As discussed in earlier sections of the plan, there is much still to be learnt about the plant and animal species occurring in the park and their management needs. The Service has only limited resources for undertaking research. Research by outside bodies and individuals can provide valuable information for management. Important research topics have been included in other relevant sections of the plan.

Because of the small size of the park and its importance as a wildlife refuge, research which may result in environmental damage is not appropriate.

Policies

- * The park will be available for appropriate research.
- * Researchers will be encouraged to design programs to provide information directly useful for management purposes.
- * Liaison will be maintained with researchers to obtain as much mutual information and assistance as possible. The results of research will be required to be provided to park managers.
- * Manipulative or other environmentally damaging research will not be permitted.

4.2.4 Management Operations and Non-Park Uses

No park management facilities are located in the park other than the Black Range Fire Trail. This trail was constructed prior to reservation of the park as part of a system of fire trails set up by the former Far South Coast Bushfire Prevention Association. As stated in section 4.1.3 the trail is strategically located for fire management and will be maintained.

Vehicle access to private residences along the Towamba River is obtained via a privately maintained track (Old Pram Road) through the northern edge of the park.

A geodetic station is located on the summit of Mount Imlay. Access for maintenance of the station is generally undertaken by foot and is very infrequent.

Both the above developments were constructed prior to reservation of the areas concerned and have low impact on the values of the park.

There have been a number of proposals since reservation of the park for construction of observation or communications towers on the summit of Mount Imlay, combined with vehicle access. These have been consistently opposed by the Service because they would be contrary to the purpose of reservation of the park, ie. conservation of a sample of the natural environments of the district, and would be particularly damaging to a small park like Mount Imlay which is focussed on the mountain itself.

In December 1994 a Telstra sea phone facility was constructed on the summit under Commonwealth legislation. It occupies a relatively small area and relies on maintenance access by foot or helicopter. Nevertheless, the facility has affected the natural, scenic and recreational value of the summit and the Service is concerned that no further development and hence extension of environmental impacts occurs.

Potential impacts of any further development, particularly if it involved vehicle access, could include:

- damage to rare, threatened or biogeographically significant plant communities or their habitats;
- damage to the habitat of rare or vulnerable native animal species;
- soil erosion;
- changed drainage patterns;
- weed invasion;

- the introduction of pathogens;
- increased access for introduced predators;
- possible impacts on Aboriginal cultural significance;
- requirements for clearing and burning to provide fire protection around any facility;
- visual impacts both from a distance and from within the summit area;
- loss of recreational walking value of the summit and the sense of achievement for walkers;
- environmental damage caused by illegal public use of any access track; and
- likely pressures for opening a summit access track to the public, with consequent needs for parking and other facilities and associated vegetation damage.

A draft plan of management prepared for the park in 1978 specifically prohibited any new development on the summit. Policies in this current plan prohibiting new developments continue the protective approach to management of the park applied by the National Parks and Wildlife Service since its reservation.

Policies

- * Maintenance access to the geodetic station and sea phone tower on Mount Imlay will be permitted by foot or, if essential, by helicopter.
- * Continued private vehicle access will be permitted along Old Pram road to properties along the Towamba River. Maintenance of the road in the park will be the responsibility of the owners whose properties the road services and will be subject to conditions minimising environmental impact.
- * No gravel, timber or other materials may be won within or removed from the park for road construction, road maintenance or any other purpose.
- * No additional construction of communications or other non-park facilities will be permitted on Mount Imlay.
- * Vehicle access to the Mount Imlay summit will not be permitted.

5. PLAN IMPLEMENTATION

This plan of management is part of a system of management developed by the National Parks and Wildlife service. The system includes the National Parks and Wildlife Act, management policies, established conservation and recreation philosophies, and strategic planning at corporate, Regional and District levels.

The implementation of this plan will be undertaken within the annual programs of the Service's Eden District. Priorities, determined in the context of district and regional strategic planning, will be subject to the availability of necessary staff and funds and to any special requirements of the Director-General or Minister.

District programs are subject to ongoing review, within which, works and other activities carried out in Mount Imlay National Park are evaluated in relation to the objectives laid out in this plan.

The environmental impact of all development proposals will continue to be assessed at all stages of the development and any necessary investigations undertaken in accordance with established environmental assessment procedures.

Section 81 of the Act requires that this plan shall be carried out and given affect to, and that no operations shall be undertaken in relation to the national park unless they are in accordance with the plan. However, if after adequate investigation, operations not included in the plan are found to be justified, this plan may be amended in accordance with section 75 of the Act.

As a guide to the implementation of this plan, relative priorities for identified activities are summarised below:

Activity	Plan ref
High priority	
* Prepare vegetation map and fire management plan	4.1.4
Medium priority	
* Investigate impacts of introduced predators and control if needed	4.1.2
Low priority	
* Investigate and mark western walking route and pack camp site	4.2.2

REFERENCES

- Crew, D. 1993 *Archaeological Survey of Proposed Seaphone Facility Mt Imlay National Park, NSW*, A Report to Nicholas Graham-Higgs Environmental Planning and Assessment Consultant for Telstra, OTC Australia.
- Crisp, M.D. and Brooker M.I.H. 1980 'Eucalyptus imlayensis, A New Species from a Mountain of South Coast New South Wales', *Telopea* 2(1); 41-47.
- Keith D.A and Sanders J.M. 1990 'Vegetation of the Eden Region, South-eastern Australia: Species composition, diversity and structure', *J. Vegetation Science* 1:203-232.
- Keith D. and Ashby E. 1992 *Vascular Plants of Conservation Significance in the South East Forests of New South Wales*, NPWS Occasional Paper No 11.
- National Parks and Wildlife Service 1974 *Blue Print-Mount Imlay National Park*, unpublished.
- National Parks and Wildlife Service 1978 *Draft Plan of Management, Mount Imlay National Park*, unpublished.
- Worboys, G. 1978 Environmental Impact Statement for Proposed Police Radio Tower and Forestry Commission Fire Tower, Summit of Mt Imlay, unpublished.